From: BRENNTAG NORTHEAST INC. To: MILLER CHEMICAL Tuesday, April 28, 2015

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Safety Data Sheet

(Succinic acid)

DATE PREPARED: 5/28/2013 REVISION NUMBER: 5/28/2013



Section 1 - Company Information

Parchem - fine & specialty chemicals
415 Huguenot Street
New Rochelle, NY 10801
J (914) 654-6800 7 (914) 654-6899

info@parchem.com

EMERGENCY RESPONSE NUMBER: CHEMTEL - Parchem CCN# M1S0007152 Toll Free US & Canada: (800)255-3924 All other Origins: (813) 248-0585

Collect Calls Accepted

Section 2 - Product Identification/Information on Ingredients

PRODUCT NAME

parchem.com

Succinic acid

CAS NUMBER

110-15-6

SYNONYM

Butanedioic acid; amber acid

FORMULA

C4H6O4

PRODUCT	CAS NUMBER	% BY WEIGHT
Succinic acid	110-15-6	100%

Section 3 – Hazards Identification

Emergency Overview: WARNING! Causes irritation to skin, eyes and respiratory tract. eye

irritation may be severe. Health Rating: 1 - Slight Flammability Rating: 1 - Slight Reactivity Rating: 1 - Slight Contact Rating: 3 - Severe

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES. Storage Color Code: Green (General Storage). Potential Health Effects: Inhalation: Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. Ingestion: Large oral doses may cause irritation to the gastroinlestinal tract. Skin Contact: Causes irritation to skin. Symptoms include redness, itching, and pain. Eye Contact: Causes irritation, redness, and pain. Irritation may be severe. Chronic Exposure: No information found. Aggravation of Pre-existing Conditions: No information found.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a

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physician

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Section 5 – Fire Fighting Measures

Fire: As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion: Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Fire Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide. **Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire exposed containers cool.

Section 6 – Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. **Spills**: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

Section 7 - Handling & Storage

Store in a tightly closed container. Protect container from physical damage. Store in a cool, dry, ventilated area away from sources of heat or ignition. Isolate from oxidizing materials. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

Section 8 - Exposure Controls & Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved): For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the

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exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear protective gloves and clean body covering clothing. Eye Protection: Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9 - Physical & Chemical Properties

Appearance:

White crystals.

Odor:

Odorless.

Solubility:

100 g/l00 ml water @ 100C (212F). 1g/13mL cold water.

Specific Gravity:

1.57 @ 25C/4C

pH:

2.7 (0.1 molar solution)

% Volatiles by volume @ 21C (70F):

Boiling Point:

235C (455F)

Melting Point:

188C (370F)

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

Section 10 - Stability & Reactivity Data

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: May produce acrid smoke and irritating fumes when heated to decomposition.

Hazardous Polymerization: Will not occur. Incompatibilities: Oxidizers and bases.

Conditions to Avoid: Incompatibles.

Section 11 - Toxicological Information

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Oral rat LD50: 2260 mg/kg; Irritation eye rabbit, standard Draize, 750 ug (severe); Investigated

as a mutagen.

Cancer Lists: NTP Carcinogen

Section 12 – Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

Section 13 - Disposal Consideration

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14 – Transportation Data

Not regulated.

Section 15 – Regulatory Information

Ingredient: Succinic Acid (110-15-6): listed on TSCA

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated. SARA 311/312: Acute: Yes Chronic: No Fire: No

Pressure: No Reactivity: No (Pure / Solid)

Section 16 – Other Information

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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